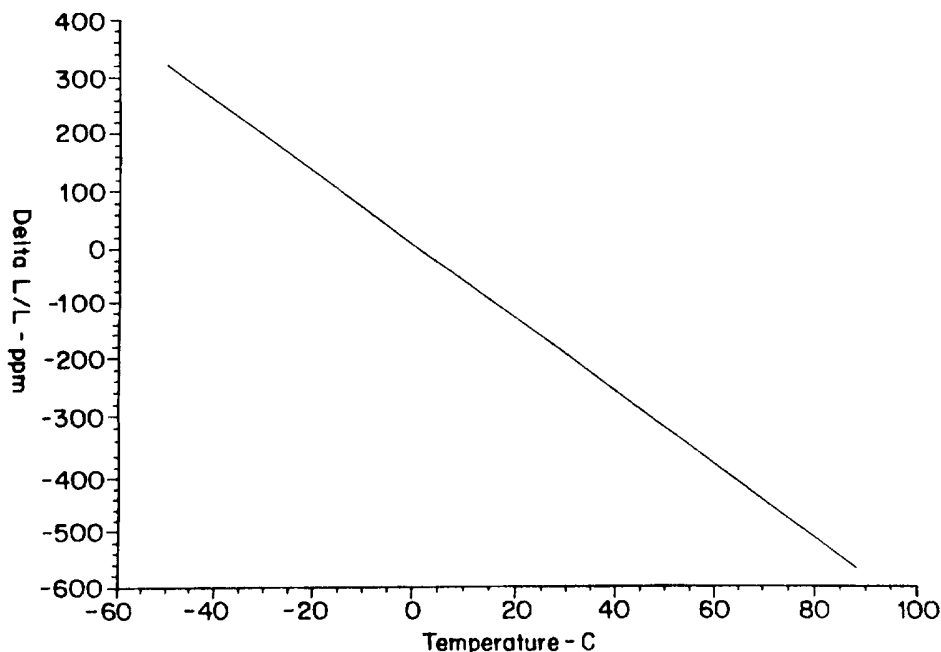




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(54) Title: ATHERMAL OPTICAL DEVICE



(57) Abstract

An athermal optical device and a method for producing the device, such as an athermal optical fiber reflective grating, are described. The athermal optical fiber reflective grating device comprises a negative expansion substrate, an optical fiber mounted on the substrate surface, and a grating defined in the optical fiber. The method for producing the athermal optical fiber reflective grating device comprises providing a negative expansion substrate, mounting an optical fiber with at least one reflective grating defined therein onto the substrate upper surface, and affixing the optical fiber to the substrate at at least two spaced apart locations.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US97/00982**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) :C03C 10/00, 10/12

US CL :501/4, 5, 7; 65/33.8

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 501/4, 5, 7; 65/33.8

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,186,729 A (BROWN et al) 16 February 1993, col. 3, lines 24-26.	1,6-14,17-20 25-27
A	US 4,814,297 A (BEALL et al) 21 March 1989	1-27
A	US 3,617,317 A (SACK) 02 November 1971	1-27
A	US 5,336,643 A (GOTO et al) 09 August 1994	1-27
A,P	US 5,591,682 A (GOTO) 07 January 1997	1-27

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